

Claim Listing

1-12. (Cancelled)

13. (Previously presented) A method comprising:

receiving from a subscriber station on an access network an authentication request, the authentication request identifying the subscriber station and identifying a designated service provider from among a plurality of service providers;

sending the authentication request to the designated service provider;

receiving from the designated service provider an authentication response indicating successful authentication of the subscriber station by the designated service provider, wherein the authentication response includes a service qualification that indicates at least one of (i) one or more types of services authorized for the subscriber station and (ii) one or more extents of service authorized for the subscriber station, wherein the service qualification specifies one or more types of communication and, for each specified type of communication, specifies whether the subscriber station is allowed to engage in the specified type of communication;

responsive to the authentication response, assigning the subscriber station to operate in a designated layer of the access network set aside for subscribers that have been authenticated by the designated service provider and to operate according to the service qualification, wherein the access network is an IP network and the designated layer is an IP subnet, and wherein assigning the subscriber station to operate in the designated layer comprises assigning to the subscriber station an IP address in the IP subnet; and

serving the subscriber station in the designated layer of the access network and pursuant to the service qualification indicated in the authentication response,

wherein serving the subscriber station in the designated layer comprises handling communications with the subscriber station according to a logic set established for the designated layer,

wherein handling communications with the subscriber station according to the logic set established for the designated layer comprises (i) detecting a packet bearing the IP address assigned to the subscriber station, and (ii) responsively applying the logic set to restrict transmission of the packet,

wherein handling communications with the subscriber station according to the logic set established for the designated layer comprises disallowing at least a predetermined type of communication from passing from the subscriber station to outside of the access network, and

wherein serving the subscriber station pursuant to the service qualification indicated in the authentication response comprises, for each type of communication specified in the service qualification, allowing or disallowing the type of communication by the subscriber station as specified by the service qualification.

14-16. (Cancelled)

17. (Previously presented) The method of claim 13, wherein serving the subscriber station in the designated layer of the access network comprises:

a gateway on the access network detecting a web page being sent to the subscriber station; and

the gateway modifying the web page to include an advertisement for the designated service provider.

18. (Previously presented) The method of claim 13, further comprising prompting the subscriber station to provide the authentication request.

19. (Previously presented) The method of claim 18, wherein prompting the subscriber station for the authentication request comprises:

presenting to a user of the subscriber station a set of the plurality of service providers;
and

prompting the user to select a service provider from among the plurality presented, wherein the user selects the designated service provider from among the plurality.

20. (Original) The method of claim 13, wherein the access network comprises a wireless access network.

21. (Previously Presented) A method carried out by an access network, the method comprising:

prompting a first client station to select a service provider from among a plurality of service providers, and receiving a signal from the first client station, indicating a first selected service provider;

sending a first authentication request message for the first client station to the first selected service provider, the first authentication request message indicating authentication information for the first client station;

receiving a first authentication response message from the first selected service provider, the first authentication response message indicating that first client station is authenticated by the first selected service provider, wherein the first authentication response includes a first service

qualification that indicates at least one of (i) one or more types of services authorized for the first client station and (ii) one or more extents of service authorized for the first client station, wherein the first service qualification specifies one or more types of communication and, for each specified type of communication, specifies whether the first client station is allowed to engage in the specified type of communication; and

in response to the first authentication response message, restricting the first client station to communications in a first logical layer of the access network associated with the first selected service provider and according to the first service qualification,

wherein restricting the first client station to communications in the first logical layer of the access network associated with the first selected service provider comprises handling communications with the first client station according to a logic set established for the first logical layer,

wherein handling communications with the first client station according to the logic set established for the first logical layer comprises disallowing at least a predetermined type of communication from passing from the first client station to outside of the access network, and

wherein restricting the first client station to communications according to the first service qualification comprises, for each type of communication specified in the first service qualification, allowing or disallowing the type of communication by the first client station as specified by the first service qualification.

22. (Previously presented) The method of claim 21, further comprising:

prompting a second client station to select a service provider from among a plurality of service providers, and receiving a signal from the second client station, indicating a second selected service provider;

sending a second authentication request message for the second client station to the first selected service provider, the second authentication request message indicating authentication information for the second client station;

receiving a second authentication response message from the second selected service provider, the second authentication response message indicating that second client station is authenticated by the second selected service provider, wherein the second authentication response includes a second service qualification that indicates at least one of (i) one or more types of services authorized for the second client station and (ii) one or more extents of service authorized for the second client station; and

in response to the second authentication response message, restricting the second client station to communications in a second logical layer of the access network associated with the second selected service provider and according to the second service qualification.

23. (Previously Presented) A communication system comprising:

means for prompting a first client station to select a service provider from among a plurality of service providers, and for receiving a signal from the first client station, indicating a first selected service provider;

means for sending a first authentication request message for the first client station to the first selected service provider, the first authentication request message indicating authentication information for the first client station;

means for receiving a first authentication response message from the first selected service provider, the first authentication response message indicating that first client station is authenticated by the first selected service provider, wherein the first authentication response includes a first service qualification that indicates at least one of (i) one or more types of services

authorized for the first client station and (ii) one or more extents of service authorized for the first client station, wherein the first service qualification specifies one or more types of communication and, for each specified type of communication, specifies whether the first client station is allowed to engage in the specified type of communication; and

means for responding to the first authentication response message by restricting the first client station to communications in a first logical layer of the access network associated with the first selected service provider and according to the first service qualification,

wherein restricting the first client station to communications in the first logical layer of the access network associated with the first selected service provider comprises handling communications with the first client station according to a logic set established for the first logical layer, and

wherein handling communications with the first client station according to the logic set established for the first logical layer comprises disallowing at least a predetermined type of communication from passing from the first client station to outside of the access network, and

wherein restricting the first client station to communications according to the first service qualification comprises, for each type of communication specified in the first service qualification, allowing or disallowing the type of communication by the first client station as specified by the first service qualification.

24. (Previously presented) The communication system of claim 23, further comprising:

means for prompting a second client station to select a service provider from among a plurality of service providers, and for receiving a signal from the second client station, indicating a second selected service provider;

means for sending a second authentication request message for the second client station to the first selected service provider, the second authentication request message indicating authentication information for the second client station;

means for receiving a second authentication response message from the second selected service provider, the second authentication response message indicating that second client station is authenticated by the second selected service provider, wherein the second authentication response includes a second service qualification that indicates at least one of (i) one or more types of services authorized for the second client station and (ii) one or more extents of service authorized for the second client station; and

means for responding to the second authentication response message by restricting the second client station to communications in a second logical layer of the access network associated with the second selected service provider and according to the second service qualification.

25. (Previously presented) The method of claim 13, further comprising:
before receiving the authentication response, assigning the subscriber station to operate in a default layer of the access network; and
handling communications in the default layer according to a default logic set.

26-27. (Cancelled)

28. (Previously presented) The method of claim 13, wherein handling communications with the subscriber station according to the logic set established for the designated layer comprises:

detecting a web page being sent to an address on the designated layer; and
injecting into the web page information specific to the designated service provider.

29. (Previously presented) The method of claim 28, wherein the information comprises an advertisement for the designated service provider.

30. (Previously presented) The method of claim 13, wherein the subscriber station communicates via an air interface with the access network.

31. (Previously presented) The method of claim 13, wherein disallowing at least the predetermined type of communication from passing from the subscriber station to outside of the access network comprises disallowing all communications from passing from the subscriber station to outside of the access network.

32. (Previously presented) The method of claim 21, wherein disallowing at least the predetermined type of communication from passing from the first client station to outside of the access network comprises disallowing all communications from passing from the first client station to outside of the access network.

33. (Previously presented) The method of claim 23, wherein disallowing at least the predetermined type of communication from passing from the first client station to outside of the access network comprises disallowing all communications from passing from the first client station to outside of the access network.